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Thus, the illumination apparatus **370** that can sufficiently radiate heat and is prevented from warping is provided.

The graphite layer **331** having a thickness as small as 50 μm or less is covered with the reinforcing body **330** and a resin film **325b** such that the periphery of the graphite layer **331** is not exposed. Such a structure can compensate for low abrasion resistance and fragility of the graphite layer **331**, thereby ensuring sufficient actual strength, without impairing thermal conductivity in the thickness direction.

Thus, the illumination apparatus **370** can have sufficient actual strength while having great flexibility.

Fifth Modified Embodiment

FIG. **33** is a cross-sectional view of an illumination apparatus according to the fifth modified embodiment and corresponds to FIG. **26B**.

An illumination apparatus **380** according to the fifth modified embodiment will be described below. The same components as in the eleventh embodiment are denoted by the same reference numerals and will not be further described.

In the preceding embodiments, the panel **318** emits illumination light from a light-emitting region on the front side. A panel may emit illumination light from the front and back sides.

The illumination apparatus **380** includes a panel **358** that can emit illumination light from the front and back sides. In addition to a reinforcing member **328** on the front side, the illumination apparatus **380** includes a frame-shaped reinforcing member **328** on the back side.

The panel **358** has substantially the same structure as the panel **318** illustrated in FIG. **22**. However, a metal layer of the cathode **309** has such a thickness that light can pass through the metal layer. Alternatively, the cathode **309** may be a transparent electrode formed of ITO.

In addition to the light-emitting region on the front side, the panel **358** can emit illumination light from a light-emitting region on the back side. Thus, the panel **358** can emit substantially white illumination light from the front and back sides.

In order to emit illumination light from the back side of the panel **358**, the illumination apparatus **380** includes, on the back side, an inverted form of the frame-shaped reinforcing member **328** on the front side. An optical film **335** on the front side is also attached to the light-emitting region on the back side.

The illumination apparatus **380**, which can emit illumination light from the front and back sides, can be suitably used in a screen for separating two customer areas. The illumination apparatus **380** can simultaneously illuminate the two customer areas. The illumination apparatus **380** can also be suitably used in a glass door of a store facing a road. The illumination apparatus **380** can simultaneously illuminate the road surface and the floor in the store.

Thus, the illumination apparatus **380** is provided that can simultaneously illuminate the front and rear.

Sixth Modified Embodiment

A sixth modified embodiment will be described below with reference to FIG. **26B**.

Although the reinforcing member **328** and the reinforcing member **330** (reinforcing body) are formed of CFRP containing carbon fiber in the preceding embodiments, the reinforcing member **328** and the reinforcing member **330** (reinforcing body) may be formed of any material having similar physical properties.

For example, the reinforcing member **328** may be formed of invar (an iron alloy containing 30% to 50% by weight Ni),

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titanium, or a titanium alloy, which exhibits a low thermal deformation (a low coefficient of linear expansion) like CFRP.

These materials may be used in combination. For example, in the structure illustrated in FIG. **26B**, the first frame-shaped reinforcing member **328** may be formed of invar having excellent processability, and the second reinforcing member **330** may be formed of CFRP.

These structures can also achieve the operational advantages of the preceding embodiments.

Seventh Modified Embodiment

A seventh modified embodiment will be described below with reference to FIG. **22**.

Although the panel **318** is a passive panel that emits substantially white light from the light-emitting region V in the preceding embodiments, the panel **318** is not limited to the passive panel and may be an active panel. More specifically, the panel **318** may be an organic EL panel having the light-emitting region V including a matrix of RGB active pixels.

This structure can also achieve the operational advantages of the preceding embodiments. Furthermore, an illumination apparatus of a desired illumination color can be provided. The illumination apparatus can also be used as a display panel for signs and signboards.

Eighth Modified Embodiment

Although the display panel **18** or the panel **318** includes the organic EL layer **8** or the organic EL layer **308** as an electro-optical layer on the glass substrate in the preceding embodiments, the display panel **18** or the panel **318** may have another structure. For example, like a glass substrate, if a transparent organic film that may be broken or cannot recover after bending is used as a substrate, the laminate structure in the preceding embodiments can be employed to increase the resistance to bending.

The entire disclosure of Japanese Patent Application No. 2009-149478, filed Jun. 24, 2009, 2009-150708, filed Jun. 25, 2009, and 2010-058826, filed Mar. 16, 2010 are expressly incorporated by reference herein.

What is claimed is:

1. An electro-optical device comprising:
 - a display panel having an electro-optical layer;
 - a first resin film disposed on the display panel to cover a first surface on the side of a display area of the display panel;
 - a second resin film disposed on the display panel to cover a second surface that is opposite the first surface;
 - a reinforcing member disposed on the first resin film, the reinforcing member having a third surface facing the first surface of the display panel and a fourth surface being opposite to the third surface, and
 - a reflective layer disposed on at least one of the third surface and the fourth surface of the reinforcing member.
2. An electro-optical device according to claim 1, wherein the reinforcing member has an opening corresponding to a position of the display area of the display panel.
3. The electro-optical device according to claim 1, wherein the reinforcing member includes a first carbon fiber layer and a second carbon fiber layer, the first carbon fiber layer containing a plurality of carbon fibers extending in a first direction, the second carbon fiber layer containing a plurality of carbon fibers extending in a second direction, the first direction and the second direction crossing each other.
4. The electro-optical device according to claim 3, wherein the first carbon fiber layer and the second carbon fiber layer are formed of resin-impregnated carbon fiber prepreg, and the